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Date: December 23, 2008 Name: Vincent J. Gnoffo, Reg. No. 44,714

Signature: 

Our Case No. 10022/578

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

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Oyvind Stromme

)

Serial No. 10/614,764

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Examiner: Con P. Tran

Filing Date: July 7, 2003

)

Group Art Unit No. 2615

For: Sound Control Installation

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Confirmation no. 8000

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**SECOND PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandra, VA 22313-1450

Dear Sir:

Applicants request review of the rejection that was mailed October 2, 2008 in the above-identified application. No amendments to the claims are being filed with this Request.

This request is being filed with a Notice of Appeal. No fees are believed due because this filing is after prosecution was reopened from appeal.

The review is requested for the reasons stated on the attached sheets. No more than five (5) pages are provided.

## **I. Introduction**

As a preliminary matter, Applicants appreciate withdrawal of the rejections and the reopening of prosecution further to our notice of appeal and pre-appeal brief filed July 5, 2008. A new office action was mailed October 2, 2008. Even with the addition of a new reference, however, the references do not disclose, alone or in combination, all of the features of the claims.

Claims 1-20 are pending in the application. The Office Action rejects claims 1-2, 5-6, 8-13 and 16-20 as being unpatentable over M. Fukumoto et al., "Finger-pointing: Pointing Interface by Image Process" in view of Cohen-Solal et al. (U.S. Patent No. 7,028,269) and Surucu et al. (U.S. Patent No. 7,028,269). Claims 3-4 and 14-15 are rejected as being unpatentable of Fukumoto et al. in view of Cohen-Solal et al., Surucu et al., and Lyman (U.S. Patent No. 4,303,836). Claim 7 is rejected as being unpatentable of Fukumoto et al. in view of Cohen-Solal et al., Surucu et al., and Pryor et al. (U.S. Patent No. 7,042,440).

## **II. The Office Action does not correctly address missing elements of the claims**

The pending claims recite, among other things, "a system associated with the microphones checks that the origin of the sound is close to the position of the hand," which is not shown by any of the references, alone or in combination.

### **A. Independent Claims 1 and 12**

Pending independent claim 1 recites a sound control installation including cameras, microphones, a control screen, a control device for positioning on the control screen a cursor in accordance with movements of a hand of a user, and a system associated with the microphones checks that the origin of the sound is close to the position of the hand.

Pending independent claim 12 recites a sound control installation for controlling an electrical unit, the sound control installation including a camera, a microphone, a control device, and a system associated with the microphone checks that the origin of sound is close to the position of the hand.

Surucu et al., which was added to the previous combination of references, discloses detecting, classifying and interpreting input events, such as by combining

stimuli from two or more sensory domains to classify and interpret the input events representing a user action. For example, in the case of a virtual keyboard, a typist may strike a surface on which a keyboard pattern is projected, and measure a sound of the strike with a transducer coupled to the typing surface. Paragraph 29. By determining that the sound occurred at a same time as the key strike, the system can confirm that a valid keystroke occurred. Force of the keystroke may also be determined from the sound. Paragraph 30. While a time and force of the sound may be considered, Surucu et al. does not disclose or suggest “a system associated with the microphones checks that the origin of the sound is close to the position of the hand.” There is no disclosure in Surucu et al. of relating a position of the hand to a position of the sound. For example, unlike the recited claims, Surucu et al. would not be able to distinguish a sound that came from the hand from a sound that did not come from the hand. Fukumoto et al. and Cohen-Solal et al. fail to fill the gaps.

Fukumoto et al. discloses a three-dimensional interface which can recognize finger pointing actions and simple hand forms in real-time by processing image sequences of the actions and forms captured by cameras. The Office Action is correct that Fukumoto et al. does not disclose or suggest using a microphone to check that the origin of a sound is close to a position of a hand of the user.

Cohen-Solal et al. discloses a multi-modal video target acquisition and redirection system. A video camera targeting system uses the camera and microphones to locate and acquires targets using inputs characterizing the target: the inputs include (1) a pointing gesture and (2) a spoken identification of the target. The system is able to determine an object to which a user is pointing with their hand and which the user identifies by voice. The microphones can also be used to pinpoint the source of sounds from the target. Col. 8, lines 6-12.

But neither Surucu et al., Cohen-Solal et al. nor Fukumoto et al., alone or in combination, disclose or suggest using a microphone to check that the origin of a sound is close to a position of a hand of a user. Any pinpointing with microphones in Cohen-Solal refers to the target, the object being pointed to, not a hand of a user, doing the pointing. Also there is no consideration of where the hand is in relation to the sound in

any of the references. Since determining if the sound is close to the hand is completely missing from the references, Applicants request that the claims be allowed.

In addition, neither Surucu et al., Cohen-Solal et al. nor Fukumoto et al. disclose or suggest a control device for controlling the at least one electrical unit when it is determined that the hand is positioned close to the origin of sound. Conversely, the claims recite the features of checking the origin of the sound with regard to a position of a hand of the user, and controlling the electrical unit based on the checking. For at least these reasons, Applicants respectfully request review of the rejection directed against the current application and withdrawal of the rejections against the claims.

Claims 1-11 further recite “positioning on the control screen a cursor in accordance with movements of a hand of a user detected by said cameras, and for controlling a determined electrical unit when the cursor is on the image of said determined electrical unit”, which is also not disclosed or suggested by any of Surucu et al., Fukumoto et al. nor Cohen-Solal et al., either alone or in combination. Fukumoto et al. may disclose using a hand to position a curser (see e.g. Fig. 1) and using hand movements to control an electrical unit (e.g. VCR) (see e.g. Fig. 15), but Fukomoto et al. does not disclose or suggest positioning a cursor to control an electrical unit when the cursor is on an image of the electrical unit. Cohen-Solal et al. and Surucu et al. fail to fill the gaps because they neither discloses nor suggest such a cursor or image of the electrical unit, nor controlling an electrical unit by placing the cursor on the image of the electrical unit. For at least these additional reasons, Applicants respectfully request review of the rejection directed against the current application and withdrawal of the rejections against the claims.

#### **B. Claims 3-4 and 14-15**

Lyman discloses an audio silencer for radio and television sets. The silencer is adapted to suppress the audio output of a radio or television set during commercial breaks in a program. Neither Lyman, Fukumoto et al., Surucu et al., nor Cohen-Solal et al., alone or in combination, disclose or suggest using a microphone to check that the origin of a sound is close to a position of a hand of a user, a control device for controlling the at least one electrical unit in accordance with movements of a hand of a user detected by said cameras when the hand is positioned close to the origin of sound,

or positioning on the control screen a cursor in accordance with movements of a hand of a user detected by said cameras and for controlling a determined electrical unit when the cursor is on the image of said determined electrical unit. For at least these reasons, Applicants respectfully request review of the rejection directed against the current application and withdrawal of the rejections against the claims.

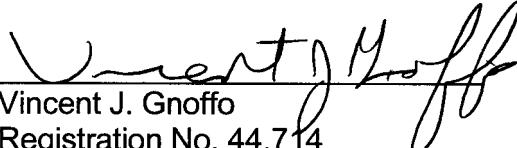
**C. Claim 7**

Pryor et al. discloses methods and apparatus for inputting position, orientation, or other object characteristic data to computers. Television cameras provide output that is analyzed and used as input to a personal computer. Neither Pryor et al., Fukumoto et al., Surucu et al., nor Cohen-Solal et al., alone or in combination, disclose or suggest using a microphone to check that the origin of a sound is close to a position of a hand of a user, a control device for controlling the at least one electrical unit in accordance with movements of a hand of a user detected by said cameras when the hand is positioned close to the origin of sound, or positioning on the control screen a cursor in accordance with movements of a hand of a user detected by said cameras and for controlling a determined electrical unit when the cursor is on the image of said determined electrical unit. For at least these reasons, Applicants respectfully request review of the rejection directed against the current application and withdrawal of the rejections against the claims.

**III. Conclusion**

For at least the above reasons, Applicants respectfully request review of the final rejection directed against the current application and withdrawal of the rejections against the claims.

Respectfully submitted,



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